

vaccine may become available in the future. Passive therapy directed toward the prevention of multiple infections should be evaluated. Gamma-globulin, in particular intravenous gammaglobulin, administered regularly has been associated with significant reduction in infection in primary immunodeficiency disorders.¹³

Immunotherapy, directed toward the reconstitution of T-cell immunity, offers potential in severely immunosuppressed patients. Aggressive therapy consisting of thymus transplantation or bone marrow transplantation has significant risk in patients with multiple infections. A number of thymic factors have been evaluated in primary immunodeficiency disorders and are being considered for patients with acquired immunodeficiency disease.¹⁴ It is possible, however, that the degree of immunologic impairment has gone beyond that which can be reconstituted by thymic factor therapy.

Future studies should be directed toward ascertaining the specific causes of the acquired immunodeficiency, the potential spontaneous reversibility of the immunodeficiency and therapy capable of providing additional protection against immunologic attrition as well as reconstitution of immunity.

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How About Organizing 'Friends of Medicine'?

THE MEDICAL PROFESSION and organized medicine seem to find themselves in a paradoxical position with respect to public opinion and public support. Physicians and even organized medicine continue to rate very well in public opinion polls that purport to measure such things as trust, integrity and performance. Yet in their public image, as this is reflected in the informational media and in public rhetoric, they seem to be depicted too often as self-serving, noncaring, unduly rich and dedicated to personal and professional self-aggrandizement. From this it would seem that it is public image rather than public opinion that has brought about a progressive deterioration in the way the medical profession and organized medicine are viewed in the political arena. Somehow the favorable public opinion of trust, integrity and good performance has lost much of its political clout and the public image (which like all images is unreal) seems to be having a growing impact upon the economic and political fortunes of the profession. This is a matter of some concern since so many issues affecting health and patient care are now being decided in the political arena.

In our political system the votes are what decide the issues. Physicians are not and never will be a significant voting block. Political action committees (the PAC's) and the devoted support of medical society auxiliaries have greatly strengthened the profession's hand. But these do not bring the strength of those responsible for the favorable public opinion polls fully to bear either to influence the profession's public image or the fortunes of physicians and their patients in the crucibles of political decision. Some ways need to be found to strengthen the voter base of the medical profession and patient care. How is this to be done? There are many patients, former patients, and friends and families of patients who could rally around physicians and their medical societies to become more organized "Friends of Medicine" for community and political action in behalf of the medical profession and better patient care. Organized groups of such "friends" are nothing new, especially in the health care field, and they make possible an enormously expanded base of community and

public support through their voluntary efforts. They can and do significantly influence the votes of others.

The public opinion polls show that medicine has many uncouneted friends. It seems reasonable to assume that many of them are waiting and willing to be called upon. With clear direction and clear and worthwhile purposes, organizations of "Friends of Medicine" could help carry many of medicine's torches for the betterment of the medical profession, patient care and the health and well-being of the public in local communities and in the legislative scene. And perhaps in turn the profession itself could get some helpful advice from these "Friends of Medicine."

—MSMW

Overdose With Tricyclic Antidepressants

THIS ISSUE CONTAINS a report by Michael Callahan discussing one of the most difficult problems facing a clinician dealing with acute overdose. Despite the seriousness and frequency of tricyclic antidepressant (TCA) overdose, little information is available to clinicians for making critical decisions concerning a patient's care. How serious is the overdose? Does the overdose warrant hospital admission and, if it does, how long should a patient be monitored and when can discharge safely occur?

Because there are few firm guidelines to follow, internists and the psychiatrists must work together to answer these questions. Most of the studies on tricyclic antidepressant overdose have been single case reports. However, recently Spiker and associates^{1,2} reported two series of tricyclic antidepressant overdoses in which plasma levels and clinical findings were correlated. Bailey and colleagues³ and Langou and co-workers⁴ supplemented previous reports with two other series of patients with TCA overdose. These reports, as well as the study presented in this issue make it clear that there are few clinical symptoms or signs that are reliable indicators of the seriousness of the overdose or the probable clinical outcome.

Spiker and co-workers found that high plasma levels were always associated with cardiac arrest, grand mal seizure, tachycardia (heart rate higher than 120 beats per minute), cardiac arrhythmia

and wide QRS (wider than 0.10 seconds) accompanied by or leading to unconsciousness or death. Furthermore, they found that the only strong indicator of high plasma TCA levels³ (greater than 1,000 ng per ml) was a wide QRS (greater than 0.12 seconds) in the electrocardiogram and also that there was a weak correlation of overdose with pupil size estimated clinically. On the other hand, Bailey and associates⁴ found that plasma levels of TCA did not correlate well with physical findings or most electrocardiographic changes. Nevertheless, in this report those patients with a QRS interval greater than 0.10 seconds had significantly elevated plasma levels. In addition, these authors found that a plasma level ratio of parent drug to metabolite greater than or equal to 2.0 was associated with acute overdose. Bailey and co-workers recommended that such a ratio be considered a meaningful indicator in the evaluation of acute overdose, because many patients in their study had blood levels in the therapeutic range and no major symptoms or signs of acute overdose. Acute overdose does not represent a steady state condition, so that tissue level may be higher than plasma level. Furthermore, this drug is highly concentrated by the myocardium.⁵ Nevertheless, unlike other overdoses, plasma level of TCA represents a cornerstone of the management of patients. The most common physical findings in large series of acute TCA overdose were tachycardia and pupillary dilatation, which were noted in more than 40 percent of the cases. Hyperreflexia and hypotension, although noted in some patients, were less frequent.

The pharmacology of TCA has been studied extensively. These drugs have a number of pharmacological actions that include anticholinergic activity, direct myocardial depressant activity, and sympathomimetic activity, which is related to their ability to block the reuptake of amines. All of these actions may contribute to the adverse effect of TCA in acute overdose. However, the individual dose-response curve for each of these actions remains undefined. The cardiovascular effect of large doses of TCA's is an exaggeration of the effect of the drug at therapeutic levels and may be the identifying features of TCA overdose.

The literature contains a number of reported cases of delayed complications in which the physicians caring for the patients were unable to predict fatal outcome from the early clinical signs. Most of these complications were related to the cardio-